

## Forestland Interpretations

Forestland interpretations are important to good management. The management of trees begins with an understanding of the soil where they grow or are to be grown. Some soils are very suitable for growing wood crops; others barely support tree cover. Different tree species may vary in production on the same soil.

Forestland interpretations should be used to assist land users in planning, installing, and maintaining forestland management systems.

### *Forest Management and Productivity*

The Forestland Management and Productivity tables presents information about suitable for producing timber for each soil map unit. Management concerns, which include hazard of erosion, equipment use, seedling mortality, and windthrow hazard, are listed by ratings of SLIGHT, MODERATE, or SEVERE. Information on potential productivity includes plant competition, common trees, site index, productivity class, and trees to plant.

### *Management Concerns*

**EROSION HAZARD** - the risk of erosion is slight if the expected soil loss is small; moderate if some measures are needed to control erosion during logging; and severe if intensive management or special equipment and methods are needed to prevent excessive loss of soil.

**EQUIPMENT LIMITATION** - A rating of slight indicates that use of equipment is not limited to a particular kind of equipment or time of year; moderate indicates a short seasonal limitation, or a need for some modification in management of equipment; and severe indicates a seasonal limitation, a need for special equipment or management, or a hazard in the use of equipment.

**SEEDLING MORTALITY** - The ratings are for seedlings from a good planting stock that are properly planted during a period of sufficient rainfall. A rating of slight indicates that the expected mortality of the planted seedlings is less than 25 percent; moderate - 25 to 50 percent; and severe - more than 50 percent.

**WINDTHROW HAZARD** - A rating of slight indicates that trees in wooded areas are not expected to be blown down by commonly occurring winds; moderate - that some trees are blown down during periods of excessive soil wetness and strong winds; and severe that many trees are blown down during periods of excessive soil wetness and moderate or strong winds.

**PLANT COMPETITION** - A rating of slight indicates little or no competition from other plants; moderate indicates that plant competition is expected to hinder the development of the fully stocked stand of desirable trees; and severe means that plant

competition is expected to prevent the establishment of a desirable stand unless the site is intensively prepared, weeded, or otherwise managed for the control of undesirable plants.

**POTENTIAL PRODUCTIVITY** - This is discussed under the ordination class symbol.

**COMMON TREES** - Trees that generally occur on the soil are listed regardless of economic importance.

**SITE INDEX AND PRODUCTIVITY CLASS** - These are discussed under ordination class symbol.

**TREES TO PLANT** - Trees that are suitable for commercial wood production and that are adapted to the soil.

See the National Forestry Manual, Subpart B for criteria used in rating management concerns.

*This subsection includes:*

- **(a) Forest Management (one or two tables)**

Cape Girardeau, Mississippi and Scott Counties, Missouri  
Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber  cu ft/ac	
11C: Peridge-----	black walnut----- eastern redcedar---- northern red oak---- shortleaf pine----- white oak-----	--- 50 70 70 ---	0 57 57 114 0	black walnut, northern red oak, shortleaf pine, white oak
11D: Peridge-----	black walnut----- eastern redcedar---- northern red oak---- shortleaf pine----- white oak-----	--- 50 70 70 ---	0 57 57 114 0	black walnut, northern red oak, shortleaf pine, white oak
11E: Peridge-----	black walnut----- eastern redcedar---- northern red oak---- shortleaf pine----- white oak-----	--- 50 70 70 ---	0 57 57 114 0	black walnut, northern red oak, shortleaf pine, white oak
12A: Elsah, FREQUENTLY FLOODED-----	American sycamore--- eastern cottonwood-- red maple----- sweetgum-----	--- 95 --- 76	0 114 0 72	black walnut, green ash, sweetgum, tuliptree

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Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber  cu ft/ac	
13: Haymond, FREQUENTLY FLOODED-----	tuliptree-----	100	114	black cherry, bur oak, green ash, pin oak, red maple, swamp white oak, sweetgum
14E: Holstein-----	black oak-----	75	57	black cherry, black oak, black walnut, green ash, northern red oak, shortleaf pine, tuliptree, white oak
	northern red oak----	75	57	
	white oak-----	65	43	
15B: Iva-----	pin oak-----	85	72	American sycamore, baldcypress, eastern white pine, red maple, tuliptree, white ash
	sweetgum-----	80	86	
	tuliptree-----	85	86	
	white oak-----	75	57	
16B: Menfro-----	black oak-----	73	57	black walnut, eastern white pine, green ash, shortleaf pine, sugar maple, tuliptree, white oak
	northern red oak----	81	57	
	sugar maple-----	68	43	
	white ash-----	70	43	
	white oak-----	59	43	

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Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber	
			cu ft/ac	
16C: Menfro-----	black oak-----	73	57	black walnut, eastern white pine, green ash, shortleaf pine, sugar maple, tuliptree, white oak
	northern red oak----	81	57	
	sugar maple-----	68	43	
	white ash-----	70	43	
	white oak-----	59	43	
16D: Menfro-----	black oak-----	73	57	black walnut, eastern white pine, green ash, shortleaf pine, sugar maple, tuliptree, white oak
	northern red oak----	81	57	
	sugar maple-----	68	43	
	white ash-----	70	43	
	white oak-----	59	43	
16E: Menfro-----	black oak-----	73	57	black walnut, eastern white pine, green ash, shortleaf pine, sugar maple, tuliptree, white oak
	northern red oak----	81	57	
	sugar maple-----	68	43	
	white ash-----	70	43	
	white oak-----	59	43	

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Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber  cu ft/ac	
17F:				
Menfro-----	black oak-----	73	57	black walnut,
	northern red oak----	81	57	eastern white
	sugar maple-----	68	43	pine, green ash,
	white ash-----	70	43	shortleaf pine,
	white oak-----	59	43	sugar maple,
				tuliptree, white
				oak
Clarksville-----	black oak-----	61	43	shortleaf pine,
	northern red oak----	61	43	sweetgum,
	shortleaf pine-----	61	86	tuliptree, white
	white oak-----	58	43	oak
18D:				
Menfro-----	black oak-----	73	57	black walnut,
	northern red oak----	81	57	eastern white
	sugar maple-----	68	43	pine, green ash,
	white ash-----	70	43	shortleaf pine,
	white oak-----	59	43	sugar maple,
				tuliptree, white
				oak
Bucklick-----	black oak-----	---	0	eastern white pine,
	northern red oak----	---	0	green ash,
	post oak-----	---	0	tuliptree, white
	sugar maple-----	---	0	oak
	white oak-----	61	43	

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Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber	
			cu ft/ac	
18E:				
Menfro-----	black oak-----	73	57	black walnut,
	northern red oak----	81	57	eastern white
	sugar maple-----	68	43	pine, green ash,
	white ash-----	70	43	shortleaf pine,
	white oak-----	59	43	sugar maple,
				tuliptree, white
				oak
Bucklick-----	black oak-----	---	0	eastern white pine,
	northern red oak----	---	0	green ash,
	post oak-----	---	0	tuliptree, white
	sugar maple-----	---	0	oak
	white oak-----	61	43	
19D:				
Menfro-----	black oak-----	73	57	black walnut,
	northern red oak----	81	57	eastern white
	sugar maple-----	68	43	pine, green ash,
	white ash-----	70	43	shortleaf pine,
	white oak-----	59	43	sugar maple,
				tuliptree, white
				oak
Holstein-----	black oak-----	75	57	black cherry, black
	northern red oak----	75	57	oak, black walnut,
	white oak-----	65	43	green ash,
				northern red oak,
				shortleaf pine,
				tuliptree, white
				oak

Cape Girardeau, Mississippi and Scott Counties, Missouri  
Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber	
			cu ft/ac	
19E:				
Menfro-----	black oak-----	73	57	black walnut,
	northern red oak----	81	57	eastern white
	sugar maple-----	68	43	pine, green ash,
	white ash-----	70	43	shortleaf pine,
	white oak-----	59	43	sugar maple,
				tuliptree, white
				oak
Holstein-----	black oak-----	75	57	black cherry, black
	northern red oak----	75	57	oak, black walnut,
	white oak-----	65	43	green ash,
				northern red oak,
				shortleaf pine,
				tuliptree, white
				oak
20E:				
Poynor-----	---	---	---	---
21D:				
Menfro-----	black oak-----	73	57	black walnut,
	northern red oak----	81	57	eastern white
	sugar maple-----	68	43	pine, green ash,
	white ash-----	70	43	shortleaf pine,
	white oak-----	59	43	sugar maple,
				tuliptree, white
				oak



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Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber  cu ft/ac	
21D: (cont)				
Bucklick-----	black oak-----	---	0	eastern white pine,
	northern red oak----	---	0	green ash,
	post oak-----	---	0	tuliptree, white
	sugar maple-----	---	0	oak
	white oak-----	61	43	
22:				
Wilbur, FREQUENTLY FLOODED-----	tuliptree-----	100	114	black cherry, bur oak, green ash, pin oak, red maple, swamp white oak, sweetgum
23:				
Wakeland, FREQUENTLY FLOODED-----	pin oak-----	90	72	American sycamore,
	sweetgum-----	88	100	baldcypress,
	tuliptree-----	90	86	eastern white
	Virginia pine-----	85	129	pine, red maple, white ash
31:				
Adler, RARELY FLOODED---	American sycamore---	115	186	American sycamore,
	eastern cottonwood--	120	186	eastern
	green ash-----	95	57	cottonwood, green
	sweetgum-----	100	143	ash, sweetgum
	water oak-----	100	100	
	willow oak-----	100	100	

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Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber  cu ft/ac	
32: Allemands, FREQUENTLY FLOODED-----	---	---	---	---
33: Alligator, RARELY FLOODED-----	cedar elm----- green ash----- honeylocust----- Nuttall oak----- sugarberry----- swamp chestnut oak-- sweetgum----- water oak----- willow oak-----	90 70 80 90 90 --- 90 90 95	100 43 86 86 100 0 100 86 86	American sycamore, eastern cottonwood, green ash, Nuttall oak, sweetgum, water oak, willow oak
34: Beulah-----	American sycamore--- cherrybark oak----- eastern cottonwood-- Nuttall oak----- water oak----- willow oak-----	--- 90 100 90 90 90	0 114 129 114 86 86	cherrybark oak, eastern cottonwood, loblolly pine, shortleaf pine
35: Diehlstadt, OCCASIONALLY FLOODED-----	common hackberry---- eastern cottonwood-- green ash----- southern red oak---- sweetgum-----	--- --- --- 84 ---	0 0 0 72 0	American sycamore, eastern cottonwood, green ash, loblolly pine, sweetgum

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Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber	
			cu ft/ac	
36: Bosket-----	cherrybark oak-----	90	114	cherrybark oak,
	eastern cottonwood--	100	129	eastern
	green ash-----	80	57	cottonwood,
	sweetgum-----	90	100	shortleaf pine,
	water oak-----	90	86	sweetgum
	willow oak-----	90	86	
37A: Bowdre, RARELY FLOODED--	cherrybark oak-----	90	114	American sycamore,
	eastern cottonwood--	110	157	eastern
	sweetgum-----	95	114	cottonwood,
	water oak-----	95	86	sweetgum
38A: Broseley-----	eastern cottonwood--	80	86	eastern cottonwood,
	pin oak-----	70	57	pin oak
39: Cairo, FREQUENTLY FLOODED-----	baldcypress-----	---	0	baldcypress,
	eastern cottonwood--	---	0	eastern
	green ash-----	---	0	cottonwood, pin
	pin oak-----	90	72	oak, red maple,
	swamp white oak-----	---	0	water tupelo

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	Common trees	Site index	Volume of wood fiber	
			cu ft/ac	
40: Clana-----	black oak-----	70	57	American sycamore, eastern cottonwood, eastern white pine, loblolly pine, pecan, pin oak, shortleaf pine, sweetgum
	eastern cottonwood--	86	86	
	pin oak-----	80	57	
	shortleaf pine-----	---	0	
	sweetgum-----	---	0	
41A: Caruthersville, RARELY FLOODED-----	American sycamore---	95	0	American sycamore, eastern cottonwood, pin oak, silver maple
	eastern cottonwood--	110	0	
42: Commerce, RARELY FLOODED	American sycamore---	---	0	cherrybark oak, pecan, Shumard's oak, water oak
	eastern cottonwood--	120	186	
	green ash-----	100	100	
	Nuttall oak-----	90	0	
	pecan-----	---	0	
	water oak-----	110	114	
	willow oak-----	---	0	
43: Cooter, OCCASIONALLY FLOODED-----	baldcypress-----	---	0	baldcypress, eastern cottonwood, pin oak
	eastern cottonwood--	95	114	
	pin oak-----	80	57	

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	Common trees	Site index	Volume of wood fiber  cu ft/ac	
44: Crevasse, FREQUENTLY FLOODED-----	eastern cottonwood-- loblolly pine----- sweetgum----- white oak-----	100 90 90 90	129 129 100 72	eastern cottonwood, loblolly pine
45: Diehlstadt, OCCASIONALLY FLOODED-----	common hackberry---- eastern cottonwood-- green ash----- southern red oak---- sweetgum-----	--- --- --- 84 ---	0 0 0 72 0	American sycamore, eastern cottonwood, green ash, loblolly pine, sweetgum
46: Dubbs-----	cherrybark oak----- eastern cottonwood-- green ash----- Nuttall oak----- Shumard's oak----- sweetgum----- water oak----- willow oak-----	100 100 80 95 100 95 90 95	143 129 57 0 72 114 86 86	American sycamore, eastern cottonwood, green ash, Nuttall oak, sweetgum, tuliptree
47: Dundee-----	cherrybark oak----- eastern cottonwood-- sweetgum----- water oak-----	105 100 100 95	172 129 143 86	cherrybark oak, eastern cottonwood, sweetgum, tuliptree, water oak

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	Common trees	Site index	Volume of wood fiber  cu ft/ac	
48: Farrenburg, RARELY FLOODED-----	baldcypress----- eastern cottonwood-- pin oak----- sweetgum-----	--- 96 86 ---	0 0 72 0	American sycamore, eastern cottonwood, pin oak
49: Jackport-----	cherrybark oak----- green ash----- sweetgum----- water oak----- willow oak-----	90 80 90 90 90	114 43 100 86 86	cherrybark oak, eastern cottonwood, Nuttall oak, willow oak
50: Lilbourn, RARELY FLOODED	baldcypress----- eastern cottonwood-- pin oak-----	--- 90 80	0 0 57	baldcypress, eastern cottonwood, green ash, pin oak
51A: Malden-----	shortleaf pine-----	70	114	black oak, loblolly pine, shortleaf pine
52B: Memphis-----	cherrybark oak----- loblolly pine----- sweetgum-----	90 90 90	114 129 100	cherrybark oak, loblolly pine, tuliptree

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Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber  cu ft/ac	
52C: Memphis-----	cherrybark oak----- loblolly pine----- sweetgum-----	90 90 90	114 129 100	cherrybark oak, loblolly pine, tuliptree
52D3: Memphis, SEVERELY ERODED	cherrybark oak----- loblolly pine----- sweetgum-----	90 90 90	114 129 100	cherrybark oak, loblolly pine, tuliptree
52E3: Memphis, SEVERELY ERODED	cherrybark oak----- loblolly pine----- sweetgum-----	90 90 90	114 129 100	cherrybark oak
53: Mhoon, RARELY FLOODED---	American sycamore--- eastern cottonwood-- green ash----- honeylocust----- Nuttall oak----- swamp chestnut oak-- sweetgum----- water oak-----	100 110 90 --- --- --- --- ---	143 157 57 0 0 0 0 0	green ash, Nuttall oak, water oak
54: Reelfoot, RARELY FLOODED	cherrybark oak----- eastern cottonwood-- green ash----- sweetgum----- water oak-----	100 105 85 100 90	143 143 57 143 86	cherrybark oak, eastern cottonwood, green ash, sweetgum, water oak

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Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber	
			cu ft/ac	
55: Roellen, OCCASIONALLY FLOODED-----	cherrybark oak-----	90	114	eastern cottonwood, sweetgum
	eastern cottonwood--	100	129	
	sweetgum-----	90	100	
	water oak-----	90	86	
56E: Saffell-----	loblolly pine-----	68	86	loblolly pine, shortleaf pine
	shortleaf pine-----	60	86	
	white oak-----	---	0	
57B: Scotco-----	black oak-----	---	0	black oak, loblolly pine, shortleaf pine, southern red oak
	post oak-----	---	0	
	southern red oak----	62	43	
57C: Scotco-----	black oak-----	---	0	black oak, loblolly pine, shortleaf pine, southern red oak
	post oak-----	---	0	
	southern red oak----	62	43	



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	Common trees	Site index	Volume of wood fiber	
			cu ft/ac	
58: Sharkey, RARELY FLOODED-	cedar elm-----	---	0	green ash, Nuttall oak, water oak
	green ash-----	---	0	
	honeylocust-----	---	0	
	Nuttall oak-----	90	0	
	sugarberry-----	---	0	
	swamp chestnut oak--	---	0	
	sweetgum-----	90	100	
	water oak-----	90	86	
	willow oak-----	100	100	
59: Sharkey, RARELY FLOODED-	cedar elm-----	---	0	green ash, Nuttall oak, water oak
	green ash-----	---	0	
	honeylocust-----	---	0	
	Nuttall oak-----	90	0	
	sugarberry-----	---	0	
	swamp chestnut oak--	---	0	
	sweetgum-----	90	100	
	water oak-----	90	86	
	willow oak-----	100	100	
60: Sharkey, RARELY FLOODED-	cedar elm-----	---	0	green ash, Nuttall oak, water oak
	green ash-----	---	0	
	honeylocust-----	---	0	
	Nuttall oak-----	90	0	
	sugarberry-----	---	0	
	swamp chestnut oak--	---	0	
	sweetgum-----	90	100	
	water oak-----	90	86	
	willow oak-----	100	100	

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Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber  cu ft/ac	
60: (cont) Steele, RARELY FLOODED--	eastern cottonwood--	85	86	eastern cottonwood,
	pin oak-----	80	57	pin oak
61: Sikeston, FREQUENTLY FLOODED-----	baldcypress-----	---	0	American sycamore,
	eastern cottonwood--	100	129	eastern
	pin oak-----	95	72	cottonwood, pin
	sweetgum-----	95	114	oak, sweetgum, water oak
62: Steele, RARELY FLOODED--	eastern cottonwood--	85	86	eastern cottonwood,
	pin oak-----	80	57	pin oak
63: Tiptonville-----	cherrybark oak-----	90	114	cherrybark oak,
	eastern cottonwood--	100	129	eastern
	green ash-----	90	57	cottonwood, green
	Nuttall oak-----	90	86	ash, Shumard's
	sweetgum-----	90	100	oak, tuliptree

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Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber  cu ft/ac	
64: Towosahgy-----	eastern cottonwood-- sweetgum-----	85 80	86 86	American sycamore, eastern cottonwood, eastern white pine, loblolly pine, pecan, pin oak, Scotch pine, shortleaf pine, sweetgum
65: Tunica, RARELY FLOODED--	cherrybark oak----- eastern cottonwood-- green ash----- Nuttall oak----- sweetgum-----	90 105 100 105 90	114 143 57 0 100	American sycamore, cherrybark oak, eastern cottonwood, green ash, Nuttall oak, sweetgum
66: Wardell, RARELY FLOODED-	eastern cottonwood-- pin oak-----	90 80	100 57	eastern cottonwood, pecan, pin oak, sweetgum
67: Orthents-----	---	---	---	---
Water-----	---	---	---	---
68: Pits-----	---	---	---	---

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Forest Productivity

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber  cu ft/ac	
70: Falaya, OCCASIONALLY FLOODED-----	cherrybark oak----- eastern cottonwood-- green ash----- loblolly pine----- Nuttall oak----- water oak-----	100 100 90 90 110 100	157 129 129 129 100 100	cherrybark oak, eastern cottonwood, green ash, sweetgum, tuliptree
M-W: Water-----	---	---	---	---
W: Water-----	---	---	---	---